

Amendment

Amendment to Claims

Claim 1 (currently amended): A communication system comprising:

a communication network;

a client process hosted on a client device to receive user inputs from a user interface and to transmit the inputs through the communication network;

a plurality of communication interfaces to receive inputs to an application process from a plurality of sources, a first communication interface being adapted for receiving inputs from the client process according to a first Internet compliant protocol and a second communication interface being adapted for receiving inputs according to a second Internet compliant protocol distinct from the first Internet compliant protocol; and

a validation engine to define Internet protocol specific validation criteria for inputs to the application ~~from any of the communication interfaces provided according to at least the first and second Internet compliant protocols, to determine the validity of inputs received on a second communication interface~~ and to provide validation data representative of the validation criteria for inputs to the application provided according to the first Internet compliant protocol in response to a query from the first communication interface,

~~wherein the first communication interface comprises logic to transmit computer readable instructions to the client process for validating inputs provided at the user interface.~~

Claim 2 (currently amended): The communication system of claim 1, wherein the first communication interface comprises an HTTP server and the client process comprises a network browser, and wherein the first communication interface comprises logic to transmit computer readable instructions to the client process for validating inputs provided at the network browser according to the first Internet compliant protocol.

Claim 3 (currently amended): The communication system of claim 1, wherein the second communication interface comprises one of an SNMP manager, an electronic mail process, and a VoIP process ~~and a telephony server coupled to a public switched telephone network.~~

Claim 4 (original): The communication system of claim 1, wherein the first communication interface comprises logic to transmit machine-readable instructions to the client process for generating a graphical user interface to accept user inputs and for validating inputs received at the graphical user interface.

Claim 5 (original): The communication system of claim 1, wherein the second communication interface is adapted to receive inputs to the application process from an external process independently of any input validation at the external process, and wherein the validation engine provides a message to the second communication interface to indicate whether the received inputs are valid.

Claim 6 (original): The communication system of claim 5, wherein the second communication interface comprises logic to receive inputs to the application process from the external process according to one of a simple network management protocol (SNMP), an electronic mail protocol and a voice over Internet protocol.

Claim 7 (original): The communication system of claim 1, wherein at least one of the communication interfaces is adapted to receive inputs to the application process from an external process independently of any input validation at the external process, and wherein the validation engine comprises logic to provide validated inputs to the application process based upon the received inputs.

Claim 8 (currently amended): A server comprising:
a plurality of communication interfaces to receive inputs to an application process, a first communication interface being adapted for receiving inputs from a client process hosted on a client device according to a first Internet compliant protocol and a second communication interface being adapted for receiving inputs according to a second Internet compliant protocol distinct from the first Internet compliant protocol; and
a validation engine to define Internet protocol specific validation criteria for inputs to the application ~~from any of the communication interfaces received~~ provided according to at least the first and second Internet compliant protocols, ~~to determine the validity of inputs received on a second communication interface~~ and to provide validation data

representative of the validation criteria in response to a query from the first communication interface,

~~wherein the first communication interface comprises logic to transmit computer readable instructions to the client process for validating inputs provided at a user interface associated with the client device based upon the validation data.~~

Claim 9 (currently amended): The server of claim 8, wherein the first communication interface comprises an HTTP server and the client process comprises a network browser, and wherein the first communication interface comprises logic to transmit computer readable instructions to the client process for validating inputs provided at the network browser based upon the validation data.

Claim 10 (currently amended): The server of claim 8, wherein the second communication interface comprises one of an SNMP manager, an electronic mail process, and a VoIP process ~~and a telephony server coupled to a public switched telephone network.~~

Claim 11 (original): The server of claim 8, wherein the first communication interface comprises logic to transmit machine-readable instructions to the client process for generating a graphical user interface to accept user inputs and for validating inputs received at the graphical user interface.

Claim 12 (original): The server of claim 8, wherein the second communication interface is adapted to receive inputs to the application process from an external process independently of any input validation at the external process, and wherein the validation engine comprises logic to provide a message to the second communication interface to indicate whether the received inputs are valid.

Claim 13 (original): The server of claim 12, wherein the second communication interface receives inputs to the application process from the external process according to one of a simple network management protocol (SNMP), an electronic mail protocol and a voice over Internet protocol.

Claim 14 (original): The server of claim 8, wherein at least one of the communication interfaces is adapted to receive inputs to the application process from an external process independently of any input validation at the external process, and wherein the validation engine comprises logic to provide validated inputs to the application process based upon the received inputs.

Claim 15 (currently amended): An article of manufacture comprising:
a storage medium comprising machine-readable instructions stored thereon for:
determining validation criteria for inputs to an application process ~~received~~
from each of a plurality of communication interfaces of a server, a first
communication interface being adapted for receiving inputs to the application
process from a first client process hosted on a first client device according to a

first Internet compliant protocol and a second communication interface being adapted for receiving inputs to the application process according to a second Internet compliant protocol distinct from the first Internet compliant protocol;

providing validation data representative of the validation criteria for inputs received according the first Internet compliant protocol in response to a first query from the communication server; and

determining the validity of inputs received ~~on a second one of the communication interfaces~~ at the first interface based upon the first validation data.

Claim 16 (currently amended): The article of manufacture of claim 15, wherein the ~~first~~ second communication interface comprises an HTTP server ~~and the client process comprises to communicate with~~ a network browser hosted on a second client device, and wherein the storage medium further comprises machine-readable instructions stored thereon for generating machine-readable instructions executable on the second client device for validating inputs provided at a user interface associated with the network browser based upon the validation data criteria for inputs provided to the application process according to the second Internet compliant protocol.

Claim 17 (currently amended): The article of manufacture of claim 15, wherein the ~~second~~ first communication interface is adapted to receive inputs to the application process from an external process ~~independently of any input validation at the external process~~, and wherein the storage medium further comprises machine-readable

instructions stored thereon for providing a message to the second communication interface to indicate whether ~~the~~ inputs received ~~inputs~~ from the external process are valid.

Claim 18 (currently amended): The article of manufacture of claim 17, wherein the storage medium further comprises machine-readable instructions stored thereon for determining validity of inputs to the application process ~~transmitted to~~ received at the ~~second~~ first communication interface from the external process according to one of a simple network management protocol (SNMP), an electronic mail protocol and a voice over Internet protocol.

Claim 19 (currently amended): The article of manufacture of claim 15, wherein the storage medium further comprises machine-readable instructions stored thereon for:

validating inputs to the application process received at the ~~second~~ first communication interface from an external process ~~independently of any input validation at the external process~~; and

providing validated inputs to the application process based upon the inputs received at the ~~second~~ first communication interface.

Claim 20 (currently amended): A method comprising:

receiving inputs to an application process at each of a plurality of communication interfaces of a server, a first communication interface being adapted for receiving inputs to the application process from a client process hosted on a client device according to a

first Internet compliant protocol and a second communication interface being adapted for receiving inputs to the application process according to a second Internet compliant protocol distinct from the first Internet compliant protocol;

determining Internet protocol specific validation criteria for inputs to ~~an~~ the application process ~~received from any of the communication interfaces provided~~ according to at least the first and second Internet compliant protocols;

transmitting computer readable instructions to the client process for validating inputs provided at a user interface associated with the client device based upon the validation criteria for inputs provided according to the first Internet compliant protocol; and

determining the validity of inputs received ~~on a second one of the~~ communication interfaces according to the second Internet compliant protocol.

Claim 21 (currently amended): The method of claim 20, wherein the first communication interface comprises an HTTP server and the client process comprises a network browser, and wherein the method further comprises generating machine-readable instructions executable on the client device for validating inputs provided at a user interface associated with the network browser based upon the validation criteria for inputs provided according to the first Internet compliant protocol.

Claim 22 (currently amended): The method of claim 20, wherein the second communication interface is adapted to receive inputs to the application process from an external process ~~independently of any input validation at the external process,~~ and

wherein the method further comprises providing a message to the second communication interface to indicate whether the received inputs are valid.

Claim 23 (original): The method of claim 20, the method further comprising determining validity of inputs to the application process transmitted to the second communication interface from the external process according to one of a simple network management protocol (SNMP), an electronic mail protocol and a voice over Internet protocol.

Claim 24 (currently amended): The method of claim 20, the method further comprising:

validating inputs to the application process received at the second communication interface from an external process ~~independently of any input validation at the external process~~; and

providing validated inputs to the application process based upon the inputs received at the second communication interface.

Claim 25 (currently amended): An apparatus comprising:

means for receiving inputs to an application process at each of a plurality of communication interfaces of a server, a first communication interface being adapted for receiving inputs to the application process from a client process hosted on a client device according to a first Internet compliant protocol and a second communication

interface being adapted for receiving inputs to the application process according to a second Internet compliant protocol distinct from the first Internet compliant protocol;

means for determining Internet protocol specific validation criteria for inputs to ~~an~~ the application process received from any of the communication interfaces provided according to at least the first and second Internet compliant protocols;

means for transmitting computer readable instructions to the client process for validating inputs provided at a user interface associated with the client device based upon the validation criteria for inputs provided to the application process according to the first Internet compliant protocol; and

means for determining the validity of inputs received ~~on a second one of the communication interfaces~~ according to the second Internet compliant protocol.

Claim 26 (currently amended): The apparatus of claim 25, wherein the first communication interface comprises an HTTP server and the client process comprises a network browser, and wherein the apparatus further comprises means for generating machine-readable instructions executable on the client device for validating inputs provided at a user interface associated with the network browser based upon the validation criteria for inputs provided according to the first Internet compliant protocol.

Claim 27 (currently amended): The apparatus of claim 25, wherein the second communication interface is adapted to receive inputs to the application process from an external process ~~independently of any input validation at the external process,~~ and

wherein the apparatus further comprises means for providing a message to the second communication interface to indicate whether the received inputs are valid.

Claim 28 (original): The apparatus of claim 25, the apparatus further comprising means for determining validity of inputs to the application process transmitted to the second communication interface from the external process according to one of a simple network management protocol (SNMP), an electronic mail protocol and a voice over Internet protocol.

Claim 29 (currently amended): The apparatus of claim 25, the apparatus further comprising:

means for validating inputs to the application process received at the second communication interface from an external process ~~independently of any input validation at the external process~~; and

means for providing validated inputs to the application process based upon the inputs received at the second communication interface.

Claim 30 (new): The communication system of claim 1, wherein a third one of said plurality of communication interfaces comprises a telephony server to receive inputs to the application process from a public switched telephone network.

Claim 31 (new): The server of claim 8, wherein a third one of said plurality of communication interfaces comprises a telephony server to receive inputs to the application process from a public switched telephone network.

Claim 32 (new): The article of manufacture of claim 15, wherein the storage medium further comprises machine-readable instructions stored thereon for determining validation criteria for inputs to the application process from a third one of said plurality of communication interfaces comprising a telephony server to receive inputs to the application process from a public switched telephone network.

Claim 33 (new): The method of claim 20, wherein a third one of said plurality of communication interfaces comprises a telephony server to receive inputs to the application process from a public switched telephone network.

Claim 34 (new): The apparatus of claim 25, wherein a third one of said plurality of communication interfaces comprises a telephony server to receive inputs to the application process from a public switched telephone network.